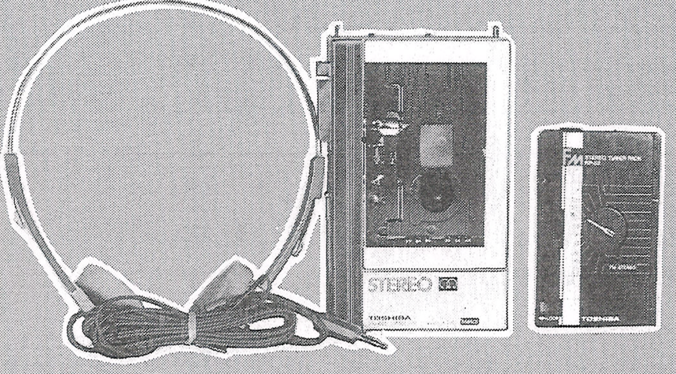
Fach XG 259

SERVICE DATA
FILE NO. 100-152A

TOSHIBA
STEREO CASSETTE PLAYER
KT-S1



SPECIFICATIONS

— Tape Section —

Track system:	Stereophonic
Recommended tape:	Normal ferric, chrome dioxide, and metal alloy: C-30 to C-120
Tape speed:	4.8 cm/sec.
Frequency response:	Reproduction: 40 — 12 kHz
Output terminals:	3.5 mm dia. stereo headphone jack x 2
Maximum output power:	Integration: 80mW (40mW + 40mW) 32 ohm with load
Battery life:	Approx. 5 hours for tape playback at 1mW output. Approx. 11 hours for radio operation.

Power supply:	6V DC (SUM-3 "AA" x 4) External power source supplied to the [DC IN 6V] jack (5.0 mm dia. center contact positive)
Dimensions (W x H x D):	89.5 x 148 x 31.5 (mm)
Weight:	430 g (including batteries but not the tuner pack)

— Tuner Section —

Receiving frequency:	88 MHz — 108 MHz

- This FM stereo tuner pack (RP-S2) is designed exclusively for this unit, KT-S2 and KT-R2, and is not usable in other types of cassette recorders.

Specifications are subject to change without notice.

TA, TC, AY, YY, EY, RY, MY

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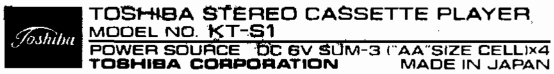
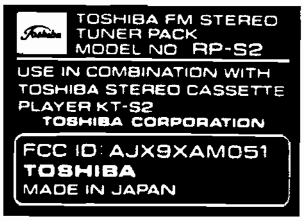
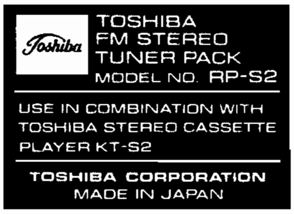
Nameplate (KT-S1)


TOSHIBA STEREO CASSETTE PLAYER
MODEL NO. KT-S1
POWER SOURCE DC 6V SUM-3 ("AA"SIZE CELL)x4
TOSHIBA CORPORATION MADE IN JAPAN

Name Label (RP-S2)
(TA, TC)


TOSHIBA FM STEREO
TUNER PACK
MODEL NO RP-S2
USE IN COMBINATION WITH
TOSHIBA STEREO CASSETTE
PLAYER KT-S2
TOSHIBA CORPORATION
FCC ID: AJX9XAM051
TOSHIBA
MADE IN JAPAN

Name Label (RP-S2)
(AY, YY, EY, MY)


TOSHIBA
FM STEREO
TUNER PACK
MODEL NO. RP-S2
USE IN COMBINATION WITH
TOSHIBA STEREO CASSETTE
PLAYER KT-S2
TOSHIBA CORPORATION
MADE IN JAPAN

1. OPERATING CONTROLS

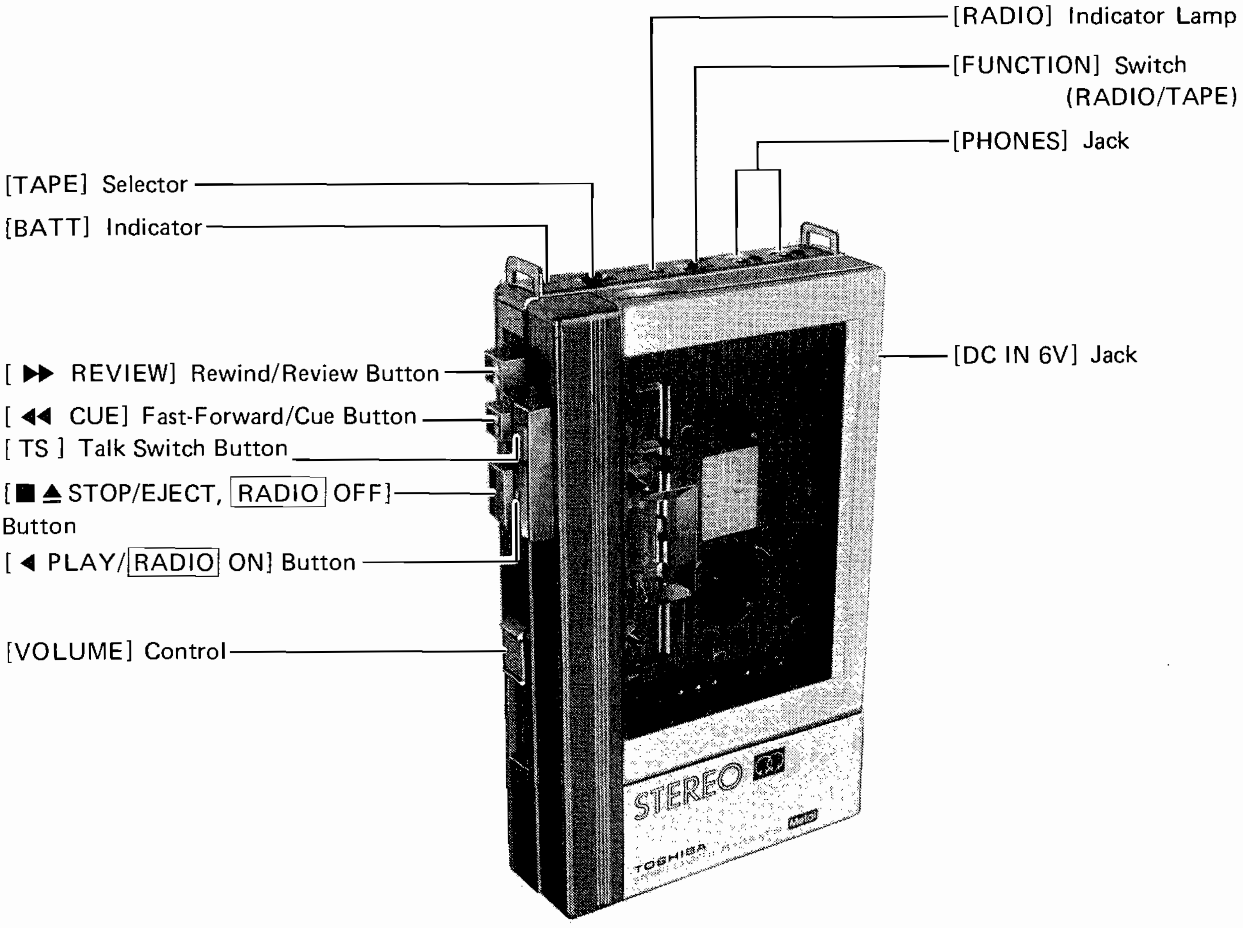

[RADIO] Indicator Lamp
[FUNCTION] Switch (RADIO/TAPE)
[PHONES] Jack
[TAPE] Selector
[BATT] Indicator
[DC IN 6V] Jack
[▶▶ REVIEW] Rewind/Review Button
[◀◀ CUE] Fast-Forward/Cue Button
[TS] Talk Switch Button
[■▲STOP/EJECT, RADIO OFF] Button
[◀ PLAY/RADIO ON] Button
[VOLUME] Control
STEREO
Metal
TOSHIBA

Figure 1.

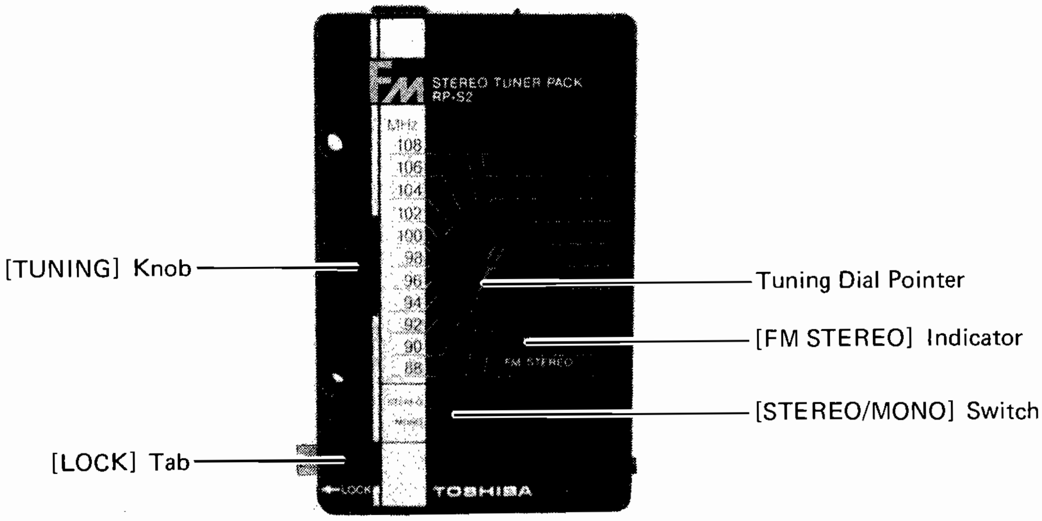

FM
STEREO TUNER PACK
RP-S2
MHz
108
106
104
102
100
98
96
94
92
90
88
FM STEREO
LOCK
TOSHIBA
[TUNING] Knob
Tuning Dial Pointer
[FM STEREO] Indicator
[STEREO/MONO] Switch
[LOCK] Tab

Figure 2.

2. DISASSEMBLY INSTRUCTIONS

■ CABINET BACK REMOVAL

1. Remove screws Ⓐ, Ⓑ, Ⓒ which secure cabinet back and a screw D which holds the right strap to detach the cabinet back.

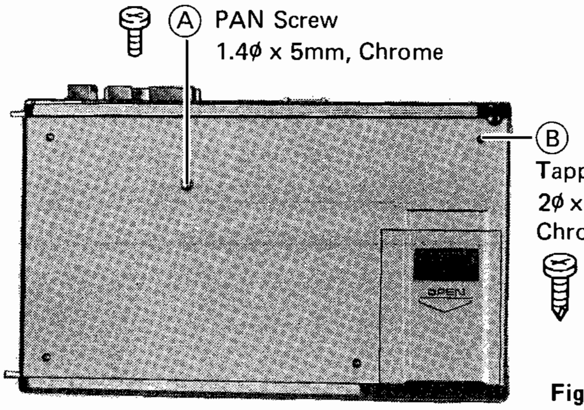

Ⓐ PAN Screw
1.4ϕ x 5mm, Chrome
Ⓑ BID
Tapping Screw
2ϕ x 10mm,
Chrome
OPEN

Figure 3.

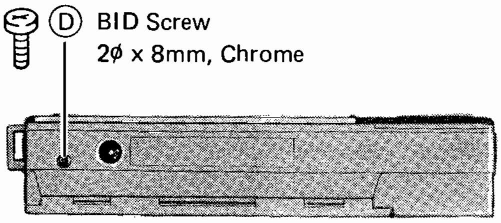

Ⓓ BID Screw
2ϕ x 8mm, Chrome

Figure 4.

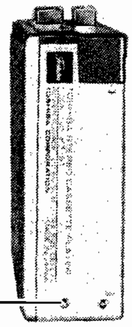

PAN Screw
1.4ϕ x 3mm, Chrome
Ⓒ

Figure 5.

■ CABINET FRONT REMOVAL

1. Remove the cabinet back.
2. Remove screws Ⓔ, Ⓕ which hold mechanism to detach the cabinet front.

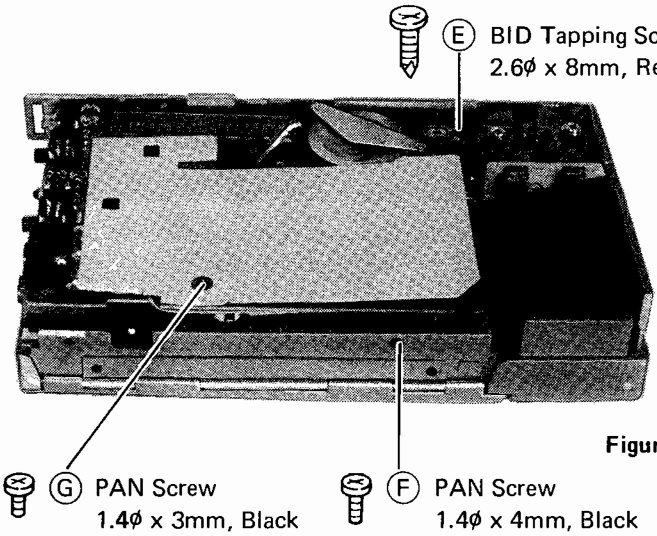

Ⓔ BID Tapping Screw
2.6ϕ x 8mm, Red
Ⓖ PAN Screw
1.4ϕ x 3mm, Black
Ⓕ PAN Screw
1.4ϕ x 4mm, Black

Figure 6.

■ HOW TO OPEN THE MAIN P.C. BOARD

1. Remove the cabinet back.
2. Remove the screw Ⓖ which holds the P.C. Board and mechanism.
3. Open the cassette cover and remove 2 screws Ⓗ which hold the mechanism cover and connector.

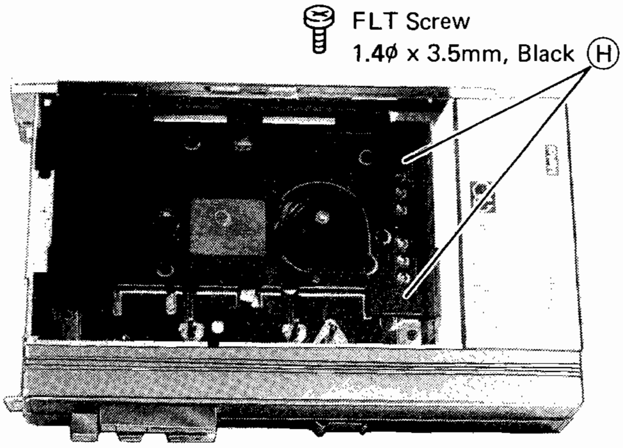

FLT Screw
1.4ϕ x 3.5mm, Black Ⓗ

Figure 7.

TUNER PACK SERVICING

1. Remove the special screws Ⓘ at the cabinet bottom of the tuner pack.
2. Detach the cabinet top of the tuner pack.
3. Open the cassette cover and set the cassette in the cassette compartment with the cabinet top of the tuner pack removed.
   In this state, you can also open the P.C. Board of the tuner pack.

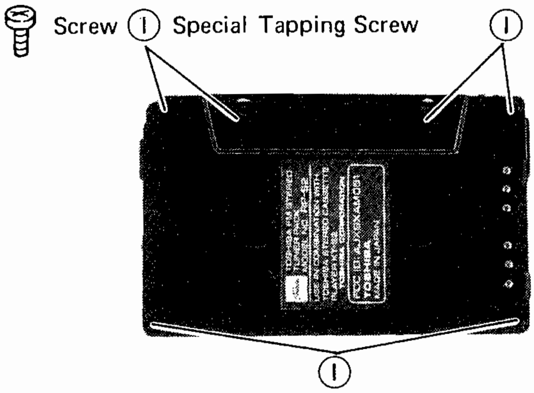

Screw Ⓘ Special Tapping Screw
Ⓘ
Ⓘ

Figure 8.

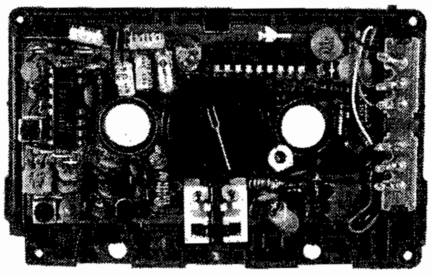


Figure 9.

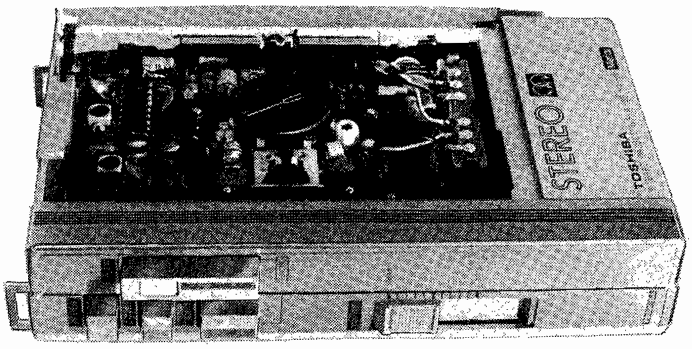

STEREO
TOSHIBA

Figure 10.

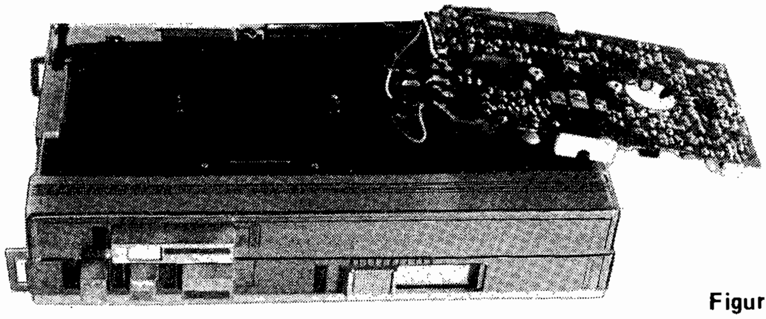


Figure 11.

6. BLOCK DIAGRAM

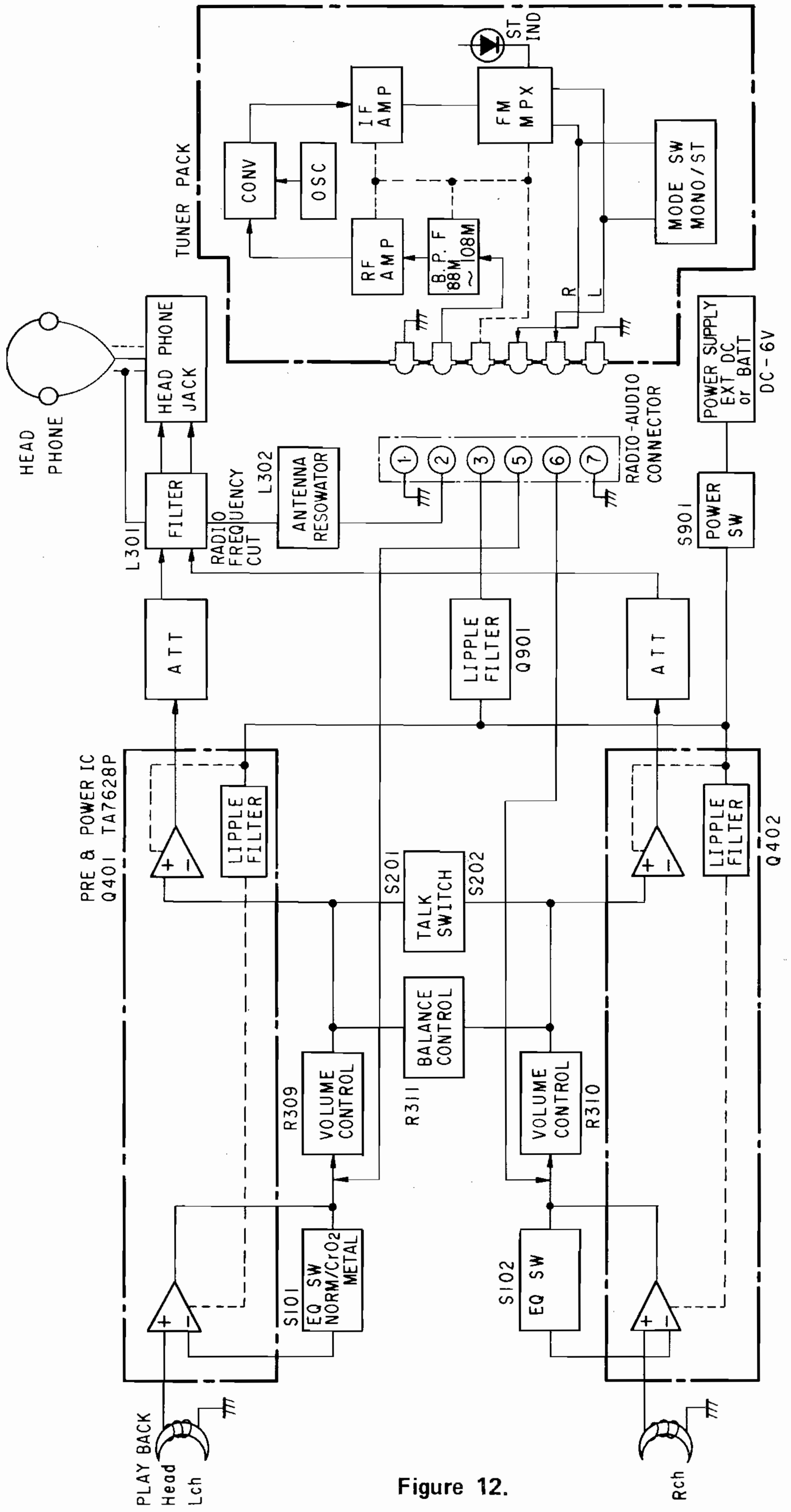

TUNER PACK
ST IND
IF AMP
FM MPX
CONV
OSC
MODE SW MONO/ST
RF AMP
B.P.F 88M ~ 108M
R
L
HEAD PHONE JACK
HEAD PHONE
POWER SUPPLY EXT DC or BATT
DC-6V
RADIO-AUDIO CONNECTOR
1
2
3
5
6
7
L302
ANTENNA RESOWATOR
L301
FILTER
RADIO FREQUENCY CUT
S901
POWER SW
ATT
LIPPLE FILTER
Q901
ATT
PRE & POWER IC
Q401 TA7628P
LIPPLE FILTER
LIPPLE FILTER
Q402
S201
TALK SWITCH
S202
BALANCE CONTROL
R311
R309
VOLUME CONTROL
VOLUME CONTROL
R310
S101
EQ SW NORM/CrO2 METAL
S102
EQ SW
PLAY BACK
Head
Lch
Rch

Figure 12.

4. ALIGNMENT INSTRUCTIONS

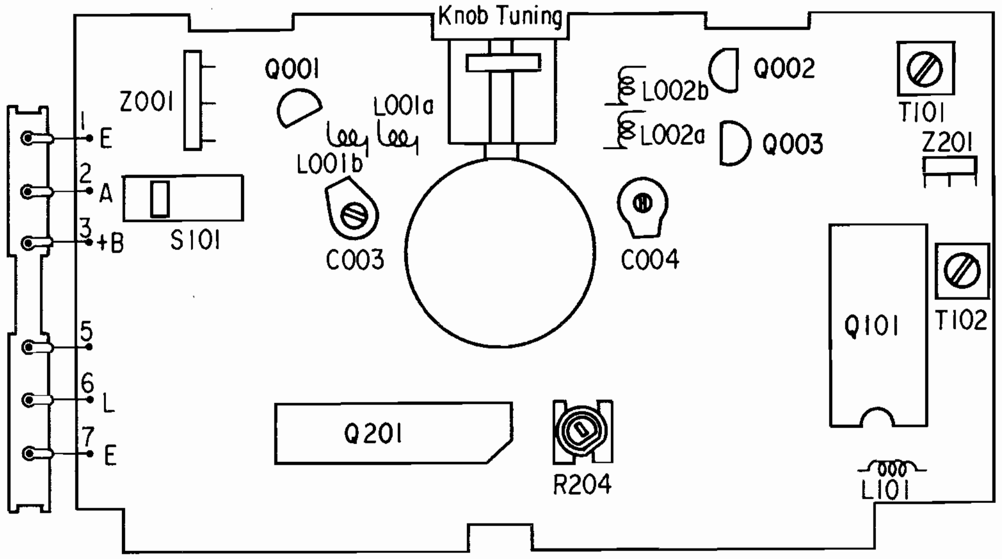

Knob Tuning
Z001
Q001
L001a
L001b
L002b
Q002
L002a
Q003
T101
Z201
1 E
2 A
3 +B
S101
C003
C004
Q101
T102
5
6 L
7 E
Q201
R204
L101

Figure 13.

FM-IF ALIGNMENT

1. Turn on both sweep generator and oscilloscope, and allow a fifteen-minute warm-up period.
2. Connect the RF SWEEP SIGNAL OUTPUT from the signal generator through the loop antenna to the receiver.
3. Connect the oscilloscope vertical input directly to the test point L or R and connect the shielded lead to the test point Earth.
4. Connect the SWEEP VOLTAGE OUTPUT of the sweep generator to the oscilloscope.
5. Proceed as outlined in the FM-IF ALIGNMENT CHART.

FM-IF ALIGNMENT CHART

Step	Signal coupling	Equip.	Tuning	Connection	Adjust. point	Pattern
1	Connect sweep generator output to a three-turn loop antenna of 10cm diameter.	Sweep generator of 10.7 MHz center freq. with 10.7 MHz marker.	Tuning Knob fully counter-clockwise (Highest Frequency.)	Set scope for connecting output signal from TUN OUT to vertical axis of scope "V" and sweep generator output to horizontal axis "H".	L004 T102	Turn the coil T102 fully counterclockwise to obtain a single peak. Fig. 16 Adjust coil T101 in order until the best single peak is obtained. Finally turn the coil T102 to obtain S curve. Fig. 17

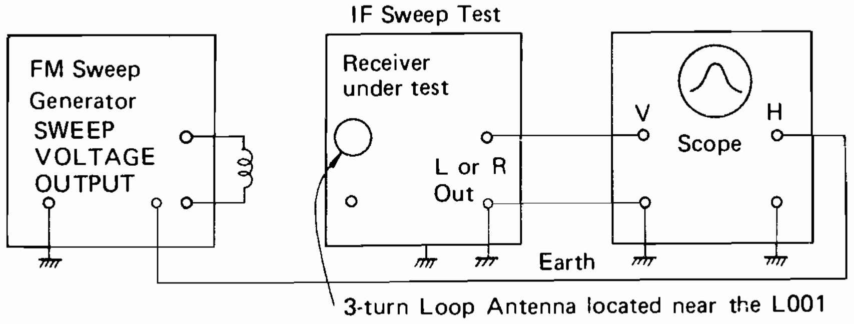

IF Sweep Test
FM Sweep Generator
SWEEP VOLTAGE OUTPUT
Receiver under test
L or R Out
V
H
Scope
Earth
3-turn Loop Antenna located near the L001

Figure 14.

Generator Couping Hook-Up

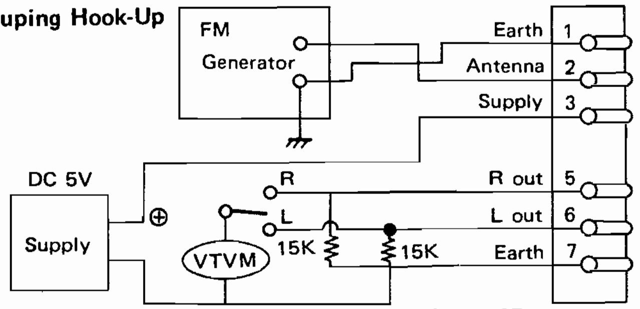

FM Generator
Earth
Antenna
Supply
1
2
3
DC 5V
Supply
R
L
VTVM
15K
15K
R out
L out
Earth
5
6
7

Figure 15.

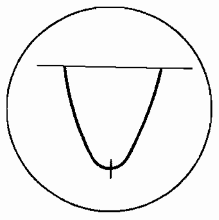


Figure 16.

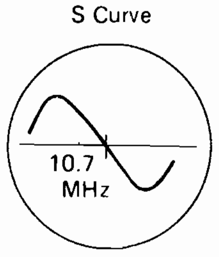

S Curve
10.7 MHz

Figure 17.

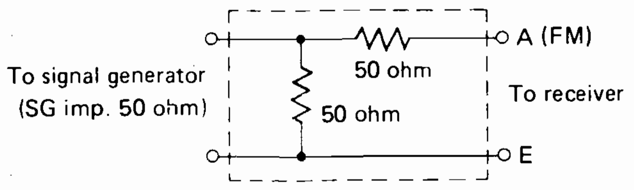
FM-RF ALIGNMENT

1. Turn on the signal generator and the VTVM, and allow a fifteen-minute warm-up period.
2. Connect the signal generator output through a 75 ohm dummy antenna across FM ANT.
3. Connect the VTVM across a 15K ohm dummy load.
4. Adjust the signal generator frequency as indicated in FM-RF ALIGNMENT CHART, and maintain a sufficient signal output level to provide a measurable indication.
5. Proceed as outlined in the FM-RF ALIGNMENT CHART.

FM-RF ALIGNMENT CHART

Step	Signal Generator	Radio Dial Setting	Adjustment	Remarks
1	87.5 MHz	Tuning Knob fully Counterclockwise (Lowest Frequency)	OCS. Coil L002	Adjust for maximum output indication
2	108 MHz	Tuning Knob fully Clockwise (Highest Frequency)	OSC. Trim. C004	Adjust for maximum output indication
3	Repeat steps 1 and 2 as required.			
4	90MHz	Tune to signal	RF Coil L001	Adjust for maximum output indication
5	106 MHz		Ant. Trim. C003	
6	Repeat steps 4 and 5 as required.			

CAUTION: When realigning the FM Receiving Frequency, the highest end of the frequency range should not be more than 108 MHz and the lowest end of the frequency range should not be less than 87.5 MHz, in order to comply with FTZ regulations in West Germany.


A (FM)
To signal generator (SG imp. 50 ohm)
50 ohm
50 ohm
To receiver
E

75 ohm dummy antenna

FREE RUN FREQUENCY ALIGNMENT

Adjust R204 under no signal condition so as to obtain 76 kHz ± 150 Hz.

PLAYBACK HEAD ADJUSTMENT

A 6.3 kHz standard tape must be used for this adjustment. Connect a VTVM or an oscilloscope to the EXT Speaker jack and adjust the azimuth by using a phillips screwdriver to maintain the maximum output voltage.

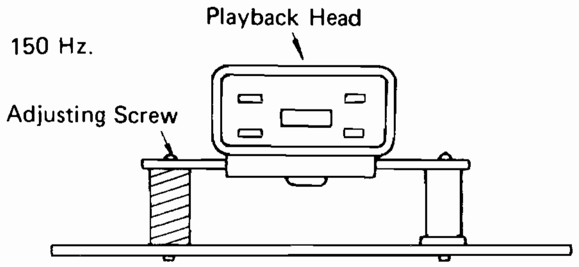
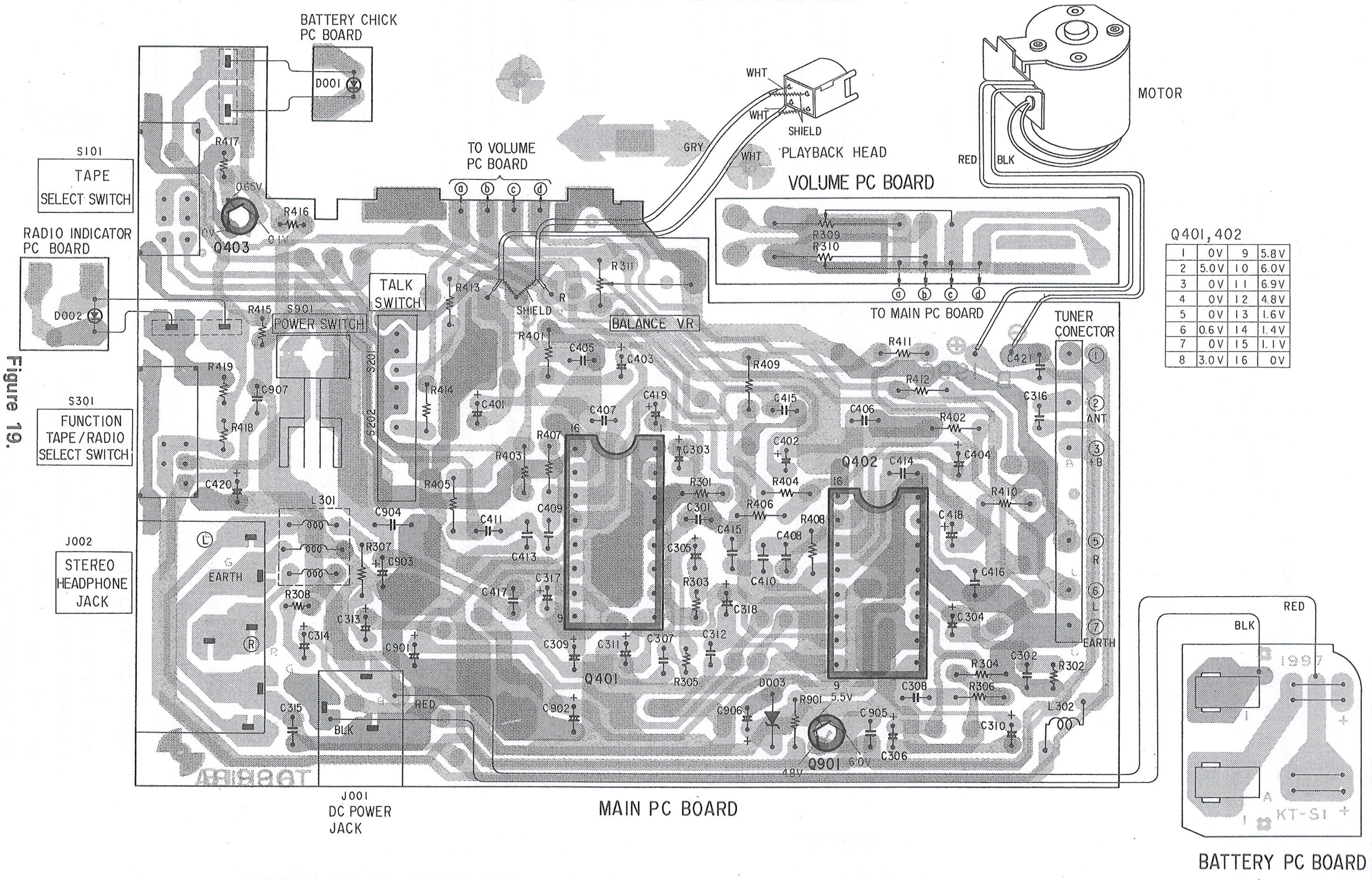

Playback Head
Adjusting Screw

Figure 18. Playback Head Adjustment

5–1. ELECTRICAL PARTS LOCATIONS

– CASSETTE PLAYER SECTION –


BATTERY CHICK PC BOARD
D001
S101 TAPE SELECT SWITCH
RADIO INDICATOR PC BOARD
D002
S301 FUNCTION TAPE/RADIO SELECT SWITCH
J002 STEREO HEADPHONE JACK
EARTH
Q403
R416
R417
R415
S901 POWER SWITCH
TALK SWITCH
S201
S202
TO VOLUME PC BOARD
ⓐ ⓑ ⓒ ⓓ
SHIELD
BALANCE VR
Q401
Q402
Q901
D003
L301
L302
WHT
GRY
SHIELD
PLAYBACK HEAD
VOLUME PC BOARD
R309
R310
TO MAIN PC BOARD
MOTOR
RED
BLK
TUNER CONECTOR
ANT
+B
R
L
EARTH
MAIN PC BOARD
J001 DC POWER JACK
BATTERY PC BOARD
KT-SI

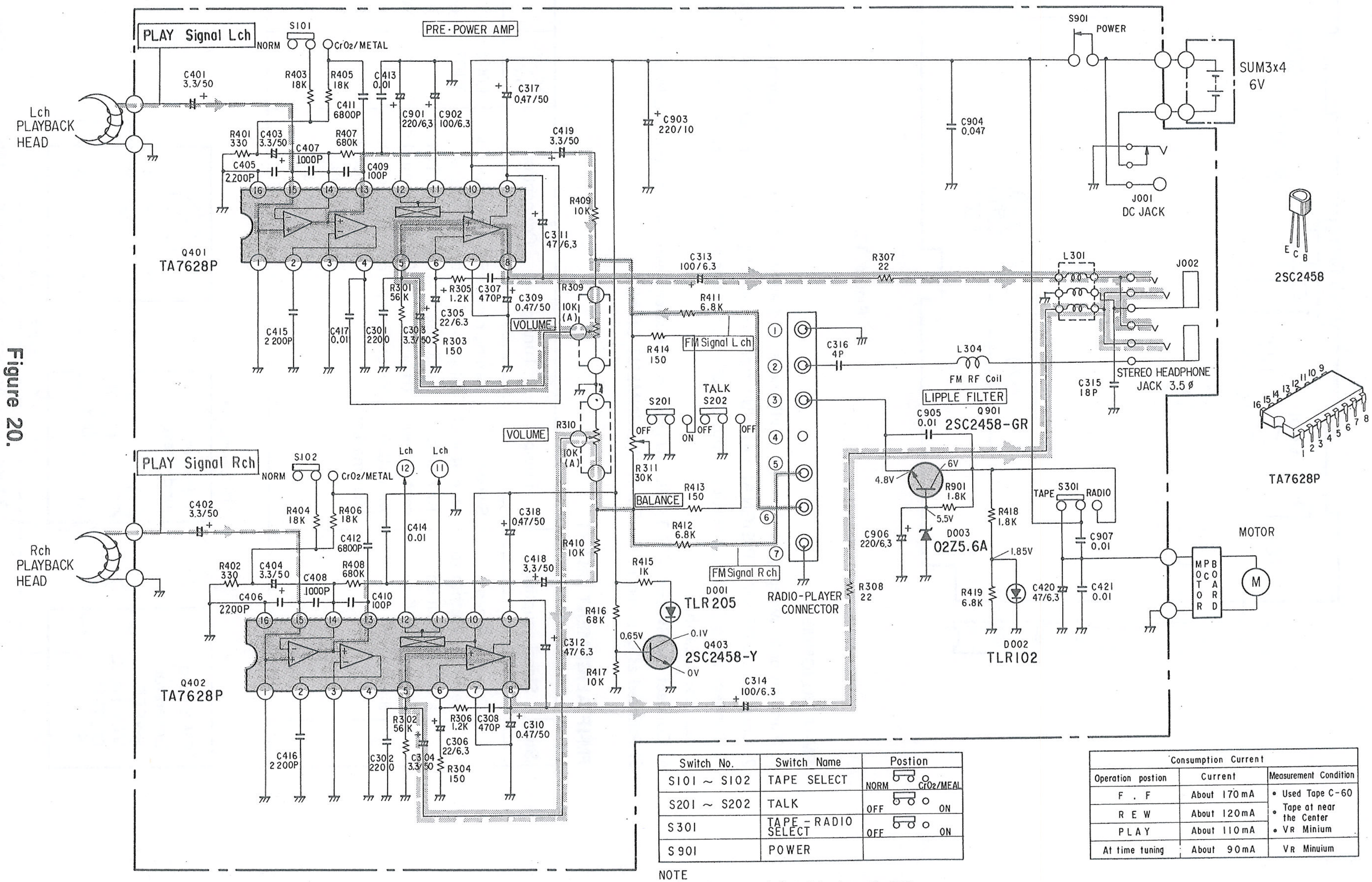
Q401, 402

1	0V	9	5.8V
2	5.0V	10	6.0V
3	0V	11	6.9V
4	0V	12	4.8V
5	0V	13	1.6V
6	0.6V	14	1.4V
7	0V	15	1.1V
8	3.0V	16	0V

Figure 19.

6–1. SCHEMATIC DIAGRAM

– CASSETTE PLAYER SECTION –


PLAY Signal Lch
PLAY Signal Rch
PRE-POWER AMP
Lch PLAYBACK HEAD
Rch PLAYBACK HEAD
S101
S102
NORM
CrO2/METAL
Q401 TA7628P
Q402 TA7628P
VOLUME
BALANCE
FM Signal Lch
FM Signal Rch
TALK S202
S201
RADIO-PLAYER CONNECTOR
L304 FM RF Coil
LIPPLE FILTER
Q901 2SC2458-GR
D003 02Z5.6A
D001 TLR205
Q403 2SC2458-Y
D002 TLR102
S301 TAPE RADIO
S901 POWER
SUM3x4 6V
J001 DC JACK
J002 STEREO HEADPHONE JACK 3.5ϕ
L301
MOTOR
2SC2458
E C B
TA7628P

Switch No.	Switch Name	Postion
S101 ~ S102	TAPE SELECT	NORM CrO2/MEAL
S201 ~ S202	TALK	OFF ON
S301	TAPE – RADIO SELECT	OFF ON
S901	POWER	

Consumption Current		
Operation postion	Current	Measurement Condition
F . F	About 170mA	• Used Tape C-60 • Tape at near the Center • VR Minium
R E W	About 120mA	
P L A Y	About 110mA	
At time tuning	About 90mA	VR Minuium

NOTE
1 All resistors are indicated in ohms. K = 1000
2 All resistors are carbon film 1/8W, ±5%
3 All capacitors are indicated in microfards P = 1/10^6
4 Electrolytic Capacitor indicated ☐ / ☐ – Working Voltage (V), Capacitance (μF)

Q401.402

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
0V	5.0V	0V	0V	0V	0.6V	0V	3.0V	5.8V	6.0V	6.9V	4.8V	1.6V	1.6V	1.1V	0V

Figure 20.

5–2. ELECTRICAL PARTS LOCATIONS

– FM TUNER PACK SECTION –

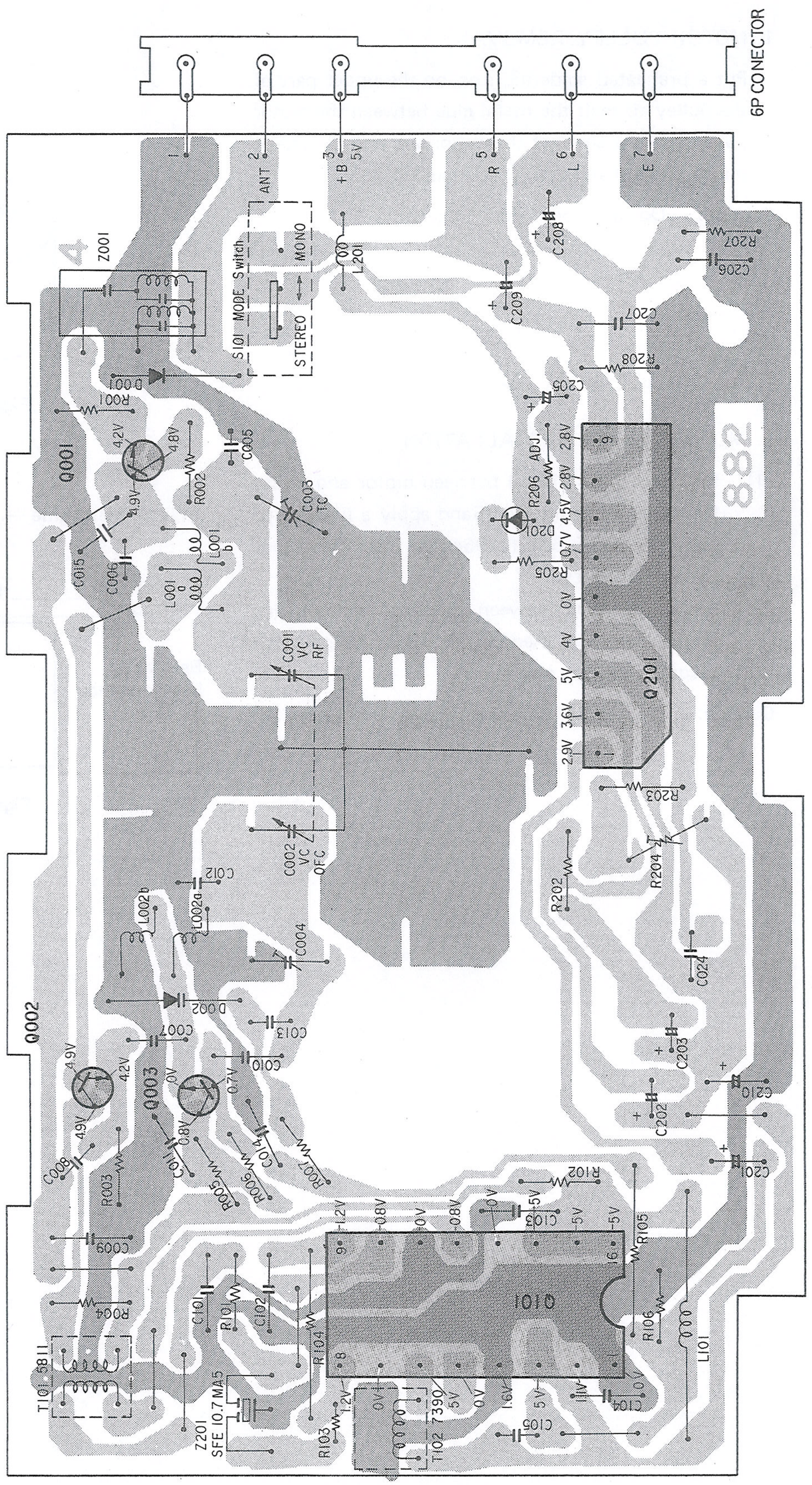
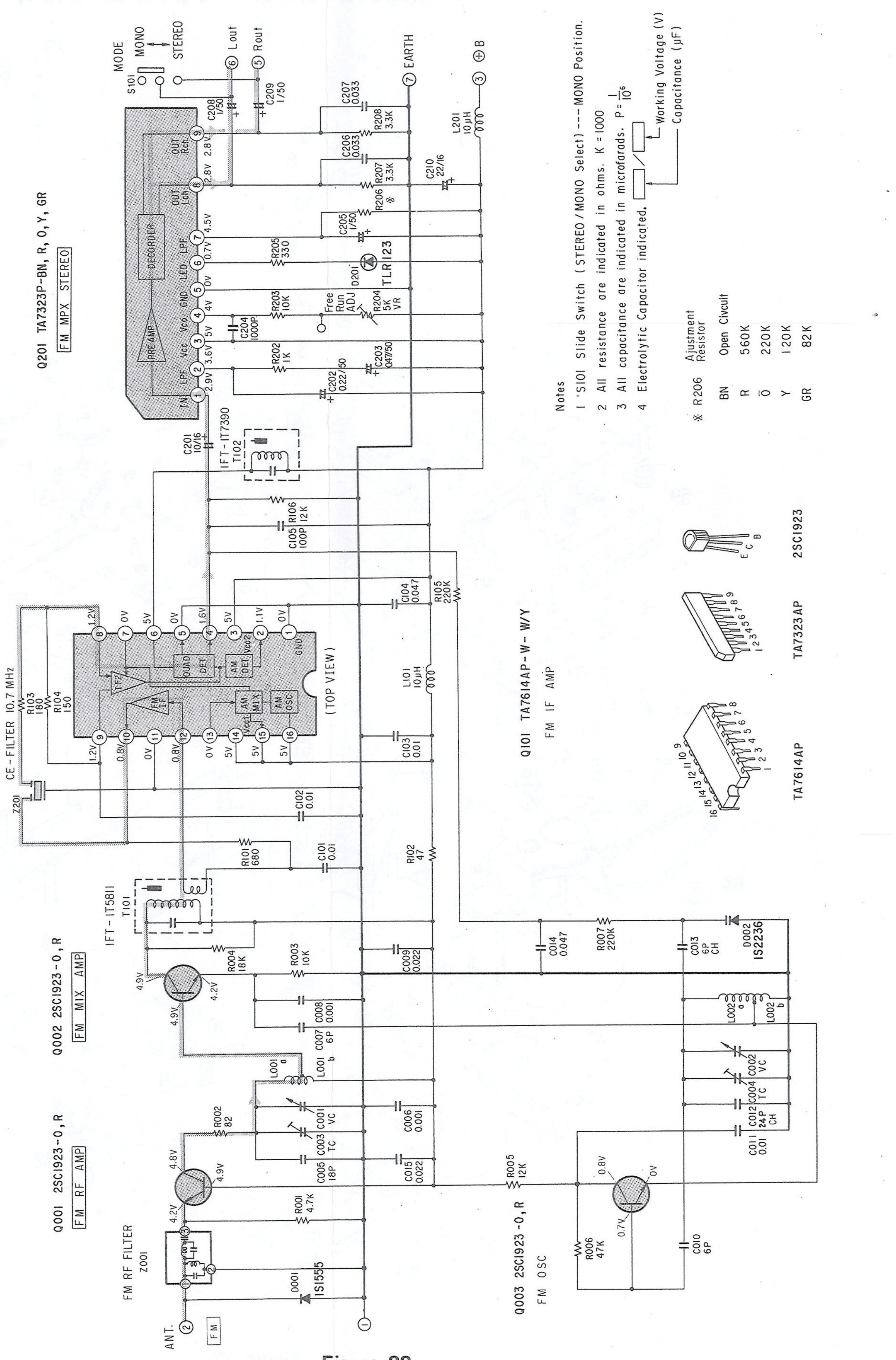

6P CONECTOR
1
2 ANT
3 +B 5V
5 R
6 L
7 E
Z001
S101 MODE Switch
STEREO
MONO
L201
Q001
Q002
Q003
Q101
Q201
D001
D002
D201
R206 ADJ.
T101 5811
T102 7390
Z201 SFE 10.7 MA5
C001 VC RF
C002 VC OFC
C003 TC
C004
882
E

Figure 21.

6–2. SCHEMATIC DIAGRAM

– FM TUNER PACK SECTION –


Q201 TA7323P-BN, R, O, Y, GR
FM MPX STEREO
S101 MODE MONO STEREO
⑥ Lout
⑤ Rout
⑦ EARTH
③ ⊕B
DECORDER
PRE AMP
IFT-1T7390 T102
CE-FILTER 10.7 MHz Z201
IFT-1T5811 T101
Q101 TA7614AP-W-W/Y FM IF AMP
(TOP VIEW)
Q001 2SC1923-O, R FM RF AMP
Q002 2SC1923-O, R FM MIX AMP
Q003 2SC1923-O, R FM OSC
FM RF FILTER Z001
ANT. ②
FM
D001 1S1555
D002 1S2236
D201 TLR123
Free Run ADJ.
L101 10µH
L201 10µH
TA7614AP
TA7323AP
2SC1923
E C B

Notes
1 'S101 Slide Switch (STEREO/MONO Select) --- MONO Position.
2 All resistance are indicated in ohms. K=1000
3 All capacitance are indicated in microfarads. P=$\frac{1}{10^6}$
4 Electrolytic Capacitor indicated. Working Voltage (V) Capacitance (µF)

※ R206	Ajustment Resistor
BN	Open Circuit
R	560K
O	220K
Y	120K
GR	82K

Figure 22.

7. MECHANISM EXPLODED VIEW

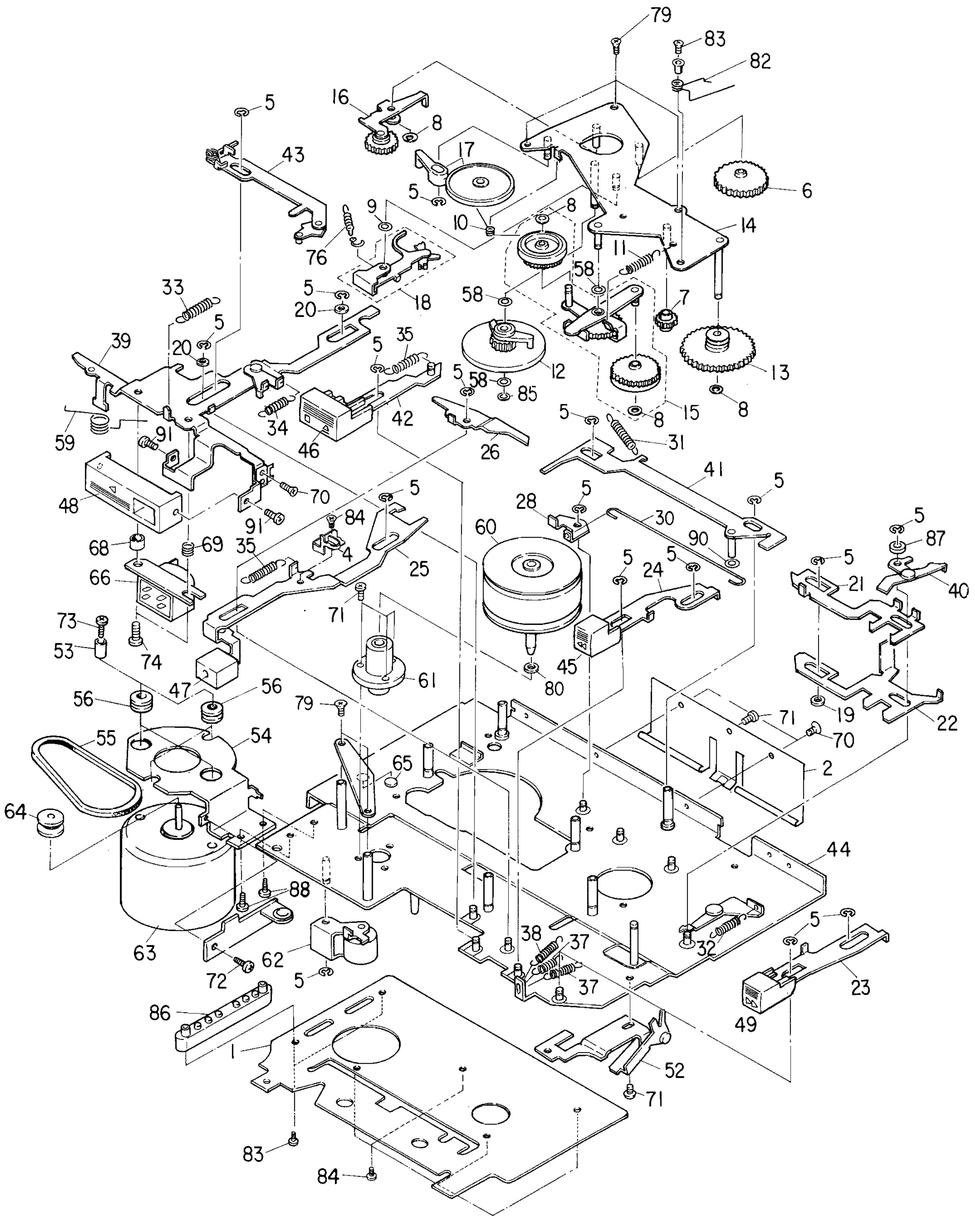

79
83
82
5
16
8
43
17
6
5
9
8
10
14
76
11
58
33
5
20
18
58
7
5
39
20
5
35
12
13
5
58
85
15
8
59
91
34
46
42
26
5
8
31
41
48
70
5
28
5
30
5
91
84
60
90
5
87
68
69
35
4
25
5
24
5
21
40
66
71
73
53
74
45
80
47
56
61
56
79
71
19
70
22
55
54
65
2
64
44
88
5
63
62
38
37
32
23
72
5
37
49
86
1
52
71
83
84

Figure 23.

8. MOTOR REPLACEMENT

1. MOTOR PULLEY REMOVAL

Put a preheated soldering iron on the upper part of the pulley to melt the metal glue between the motor pulley and the shaft of the motor and pull the motor pulley upward strongly. (See Figure 24)

Caution: Do not scorch your fingers.

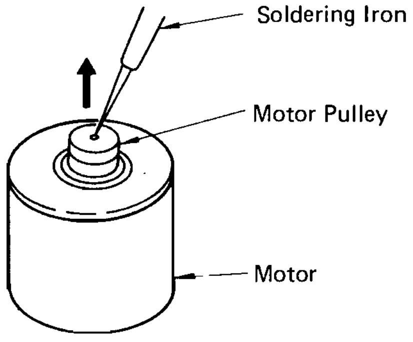

Soldering Iron
Motor Pulley
Motor

Figure 24.

2. MOTOR PULLEY INSTALLATION

(1) Maintain a gap (1mm) between motor and motor pulley as shown in Fig.25and apply a little metal glue, LOCTITE 601 (22964085) from the top of the motor pulley.

(2) Spread the glue between them by reciprocating the pulley and then fix it while keeping the adequate gap for one minute.

Caution: Do not put glue around part A in Figure 25.

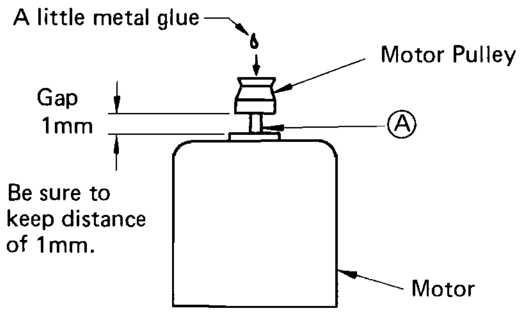

A little metal glue
Motor Pulley
Gap
1mm
Ⓐ
Be sure to
keep distance
of 1mm.
Motor

Figure 25.

9–1. CABINET EXPLODED VIEW

– CASSETTE PLAYER SECTION –

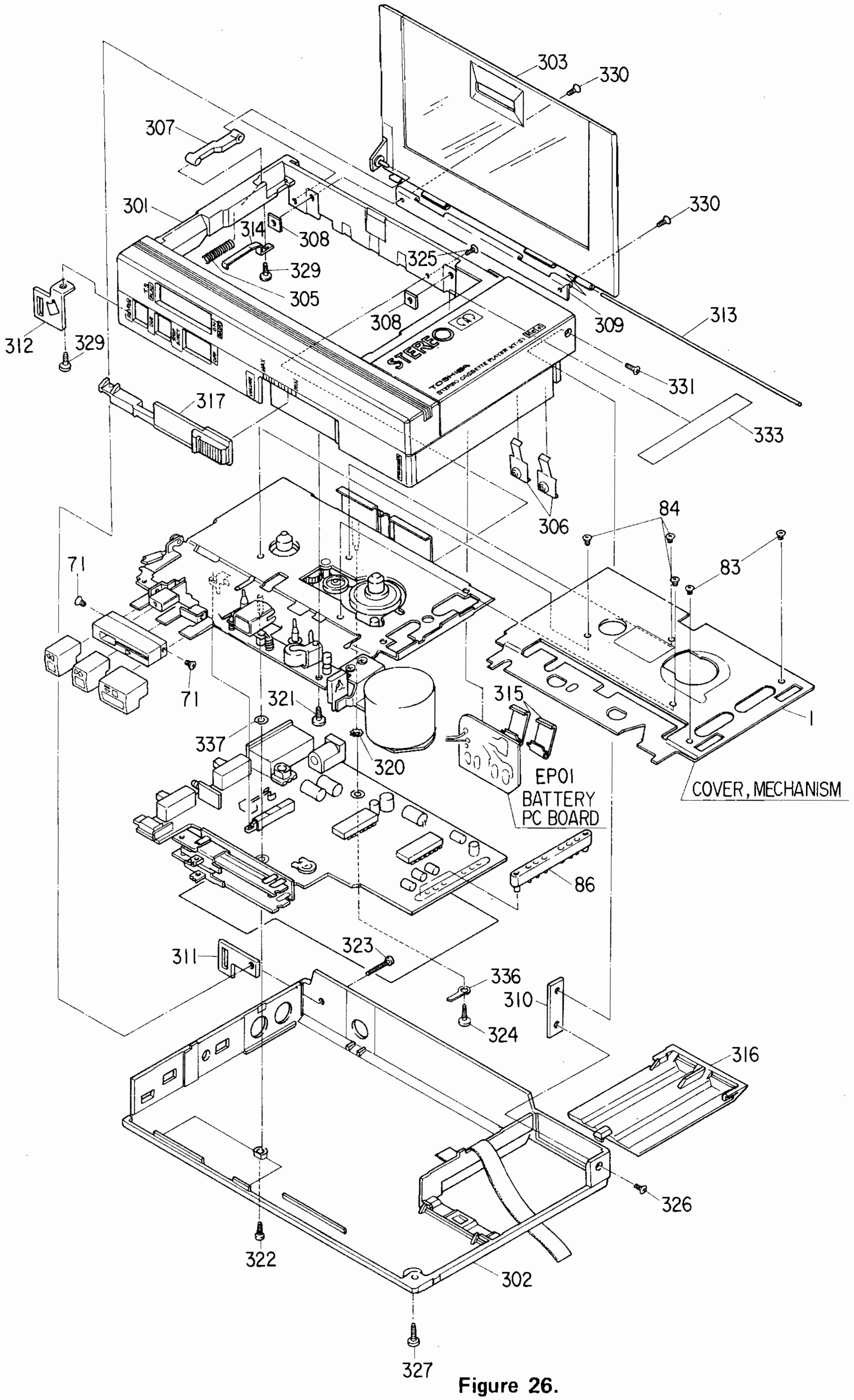


Figure 26.

10–1. PARTS LIST

– MECHANISM & CASSETTE PLAYER CABINET –

Symbol No.	Part No.	Description
		MECHANISM PARTS
1	25736975	Cover, Mechanism, S1
2	25779051	Spring, Holder
4	25779134	Spring
5	25735254	E Ring, 1.5ϕ
6	25756226	Gear, Cam
7	25756220	Gear, Rewind
8	25764361	Washer
9	25764566	Washer
10	25773464	Spring, Take-up Lever
11	25776153	Spring
12	25712394	Reel Ass'y, Take-up
13	25712373	Reel Ass'y, Supply
15	25713537	Gear Ass'y, Fast
16	25713516	Lever Ass'y, Detect
17	25713557	Lever Ass'y, Take-up
18	25791079	Lever Ass'y, Detect
19	22703166	Washer
20	25726562	Roller
30	25775191	Wire, Release
31	25776145	Spring
32	25776146	Spring
33	25776379	Spring
34	25776148	Spring
35	25776149	Spring
37	25776151	Spring
38	25776152	Spring
40	25791373	Lever Ass'y, Up Drive
45	25782479	Button, Fast Forward
46	25782478	Button, Stop
47	25782495	Button, Talk Switch
48	25782477	Button, Playback
49	25782480	Button, Rewind
53	25726568	Spacer, 2ϕ x 3mm
55	25755522	Belt Drive
56	25761424	Cushion, Motor
58	25764534	Washer
59	25773501	Spring, Pressure Lever
60	25717467	Flywheel Ass'y
61	25717514	Holder Ass'y, Capstan
62	25717465	Lever Ass'y, Pressure
63	22125803	Motor, DC, 6V
64	25758042	Pulley, Motor
65	25764593	Washer, Thrust
66	22217381	Head, Playback, Ass'y, HRPT-93
68	25726563	Spacer
69	25772504	Spring, Head
70	22707495	Screw, 1.4ϕ x 1.6mm, FLT, Chrome
71	22707496	Screw, 1.4ϕ x 2.5mm, PAN, BLK
72	22701467	Screw, 2ϕ x 3mm, BID
73	22707451	Screw, 2ϕ x 5mm, BID
74	22707505	Screw, 2ϕ x 6mm, BID
76	25776154	Spring
79	22707544	Screw, 1.4ϕ x 20mm, FLT
80	25764597	Washer
82	25773527	Spring
83	22707659	Screw, 1.4ϕ x 3.5mm, FLT, BLK
84	22707678	Screw, 1.4ϕ x 1.6mm, FLT, BLK
85	22703318	Washer
86	25781234	Conector
87	25735238	Washer
88	22707278	Screw, 2ϕ x 3mm, BID, Chrome
90	25726612	Roller
91	22707760	Screw, 1.4ϕ x 2.5mm, Special
		CABINET PARTS
301	25881317	Cabinet Ass'y, Front
302	25881265	Cabinet Ass'y, Back
303	25881266	Cassette Cover Ass'y
305	25777072	Spring, Eject
306	25779217	Spring, Battery
307	25830236	Arm, Eject
308	25846515	Nut, Plate
309	25846516	Hinge
310	25846544	Bracket, Hold
311	25846554	Strap, Right
312	25847248	Strap, Left
316	25838796	Cover, Battery
317	25837674	Knob, Variable Volume
320	22703319	Washer
321	22707525	Screw, 2.6ϕ x 8mm, BID Tapping, RED
322	22707593	Screw, 1.4ϕ x 5mm, PAN FLT, Chrome
323	22707595	Screw, 2ϕ x 8mm, BID, Chrome
324	22707612	Screw, 1.4ϕ x 3mm, PAN FLT, BLK
325	22707614	Screw, 1.4ϕ x 4mm, PAN FLT, BLK
326	22707738	Screw, 1.4ϕ x 3mm, PAN, Chrome
327	22707741	Screw, 2ϕ x 10mm, BID, Tapping, Chrome
329	22701245	Screw, 2ϕ x 6mm, BID, Tapping
330	22707486	Screw, 1.7ϕ x 4mm, FLT
331	22707740	Screw, 1.4ϕ x 2.5mm, PAN, Chrome
333	22900107	Label, Caution, C
335	25808073	Nameplate
336	22900140	Label, Caution, DC Power
337	25766067	Washer

10–2. PARTS LIST

– CASSETTE PLAYER SECTION –

Symbol No.	Part No.	Description
TRANSISTORS, ICS AND DIODES		
Q401, 402		IC, TA7628P
Q403		Transistor, 2SC2458-Y
Q901		Transistor, 2SC2458-GR
D001		Diode, TLR205, LED, RED
D002		Diode, TLR102, LED, RED
D003		Diode, 02Z5.6A
ELECTRICAL PARTS		
J001	22163721	Jack, DC Power (DC-6V)
J002	22163876	Jack, 3.5ϕ, Stereo Headphone
S101 ~ 102	22195692	Switch, Slide, Tape Select
S201	22195886	Switch, Slide, Muting
S301	22195710	Switch, Slide, Tape/Radio
S901	22195432	Switch, Leaf, Power
L301	22292136	Coil, RT-51-2136
L304	22294361	Coil, FM, RF
EP01	22191997	PC Board, Battery
CAPACITORS **D = ±0.5pF, K = ±10%, M = ±20%** **Abbreviations: CD = Ceramic Disk, EL = Electrolytic** **BL = Barrier Layer**		
C301, 302	22360367	CD, 2200pF, 50V, K
C303, 304	22440398	EL, 3.3mfd, 50V
C305, 306	22440277	EL, 22mfd, 6.3V
C307, 308	22360362	CD, 470pF, 50V, K
C309, 310	22440271	EL, 0.47mfd, 50V
C311, 312	22440279	EL, 47mfd, 6.3V
C313, 314	22440399	EL, 100mfd, 6.3V
C315	22362180	CD, 18pF, 50V, K
C316	22360371	CD, 4pF, 50V, D
C317, 318	22440271	EL, 0.47mfd, 50V
C401, 402	22440398	EL, 3.3mfd, 50V
C403, 404	22440398	EL, 3.3mfd, 50V
C405, 406	22360624	CD, 0.002mfd, 50V, K
C407, 408	22360366	CD, 0.001mfd, 50V, K
C409, 410	22360365	CD, 100pF, 50V, K
C411, 412	22360574	BL, 6800pF, 25V, K
C413, 414	22360344	BL, 0.01mfd, 25V, M
C415, 416	22360367	CD, 2200pF, 50V, K
C417	22360344	BL, 0.01mfd, 25V, M
C418	22440398	EL, 3.3mfd, 50V
C419	22440398	EL, 3.3mfd, 50V
C420	22440279	EL, 47mfd, 6.3V
C421	22360344	BL, 0.01mfd, 25V, M
C901	22440405	EL, 220mfd, 6.3V
C902	22440399	EL, 100mfd, 6.3V
C903	22440404	EL, 220mfd, 10V

Symbol No.	Part No.	Description
C904	22360346	BL, 0.047mfd, 25V, M
C905	22360344	BL, 0.01mfd, 25V, M
C906	22440405	EL, 220mfd, 6.3V
C907	22360344	BL, 0.01mfd, 25V, M
RESISTORS **All resistors are carbon film 1/8W, ±5% unless otherwise noted.**		
R301	22540531	56K ohm
R302	22550201	56K ohm
R303	22550171	150 ohm
R304	22540500	150 ohm
R305	22550182	1.2K ohm
R306	22540511	1.2K ohm
R307	22540490	22 ohm
R308	22550161	22 ohm
R309, 310	22657219	10K ohm, A, Variable Volume
R311	22658623	30K ohm, Variable Volume
R401, 402	22540504	330 ohm
R405, 406	22540525	18K ohm
R407, 408	22540544	680K ohm
R409, 410	22540522	10K ohm
R411, 412	22540520	6.8K ohm
R413, 414	22540500	150 ohm
R415	22550181	1K ohm
R416	22550202	68K ohm
R417	22550192	10K ohm
R418	22550184	1.8K ohm
R419	22550191	6.8K ohm
R901	22540513	1.8K ohm

9–2. CABINET EXPLODED VIEW

– FM TUNER PACK SECTION –

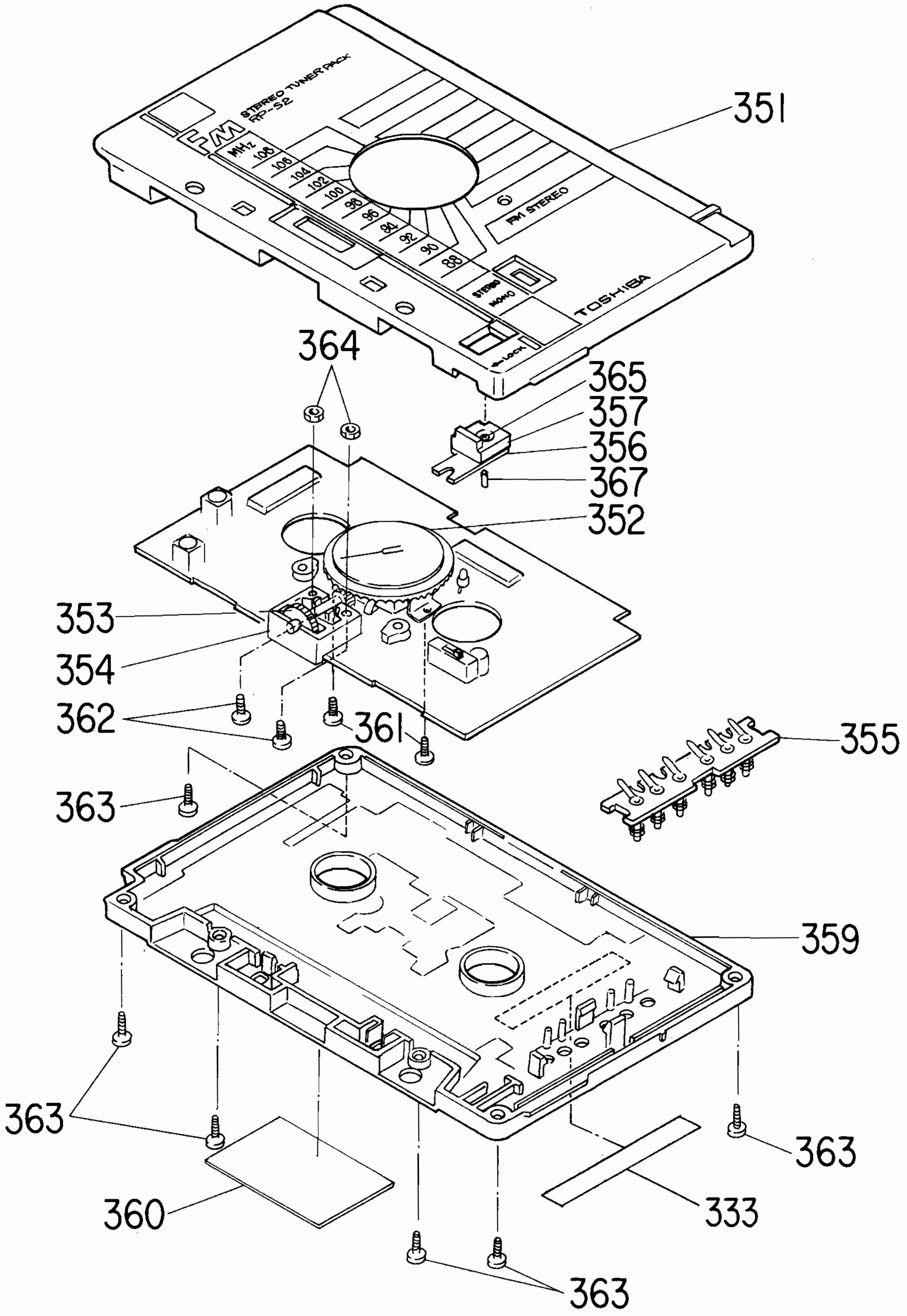


Figure 27.

10–3. PARTS LIST

– FM TUNER PACK –

Symbol No.	Part No.	Description

CABINET PARTS

351	22881067	Cabinet, Upper
352	22847374	Plate, Dial
353	22824362	Knob, Tuning
355	22161681	Connector, 6P
356	22713103	Plate, Lock
357	22884082	Knob, Lock
359	22881054	Cabinet, Bottom
360	22866177	Name Label (TA/TC)
360	22866178	Name Label, (YY/AY/EY/MY)
361	22701314	Screw, 2ϕ x 3mm, BID
362	22707555	Screw, 1.7ϕ x 3.5mm, Special
363	22707662	Screw, Special, Tapping
364	22702180	Nut, Special
365	22707614	Screw, 1.4ϕ x 4mm, Special, BLK
367	22758293	Cushion, Tube
333	22900107	Label, Caution, C

TRANSISTORS, ICS AND DIODES

Q001, 002, 003		Transistor, 2SC1923-O, R
Q101		IC, TA7614AP-W-W/Y
Q201		IC, TA7323P-BN, R, O, Y, GR
D001		Diode, 1S1555V
D002		Diode, 1S2236
D201		Diode, TLR123, LED, RED

ELECTRICAL PARTS

L001a	22294416	Coil, FM, LH8403R
L001b	22294414	Coil, FM, LH8402R
L002a	22294415	Coil, FM, Oscillator
L002b	22294413	Coil, FM, Oscillator
L101, 201	22241013	Coil, 10μH
T101	22265811	IF Transformer, FM, IT5811
T102	22267390	IF Transformer, FM, IT7390
S101	22195556	Switch, Slide, Stereo/Mono
Z001	22153197	Filter, FM, 10.7 MHz, Band-Pass
Z201	22153067	Filter, Ceramic, FM, 10.7 MHz (AY/YY/EY/MY)
Z201	22153122	Filter, Ceramic, FM, 10.7 MHz (TA/TC)

CAPACITORS

D = ±0.5pF, K = ±10%, M = ±20%

ABBREVIATIONS: CD = Ceramic Desk, EL = Electrolytic
BL = Barrier Layer, PS = Polystyrene

C001, 002	22308206	Pory Variable Capacitor
C003	22309175	Trimmer
C004	22309159	Trimmer

Note: FM Tuner pack for "RY" is optional.

Symbol No.	Part No.	Description
C005	22360563	CD, 18pF, 50V, D
C006	22360366	CD, 1000pF, 50V, K
C007	22360372	CD, 6pF, 50V, D
C008	22360366	CD, 1000pF, 50V, K
C009	22360329	BL, 0.022mfd, 31.5V, M
C010	22360372	CD, 6pF, 50V, D
C011	22360327	BL, 0.01mfd, 25V, M
C012	22360591	CD, 24pF, 50V, D
C013	22360368	CD, 6pF, 50V, D
C014	22360346	BL, 0.047mfd, 12.5V, M
C015	22360329	BL, 0.022mfd, 31.5V, M
C101, 102, 103	22360327	BL, 0.01mfd, 25V, M
C104	22360346	BL, 0.047mfd, 12.5V, M
C105	22360365	CD, 100pF, 50V, K
C201	22440276	EL, 10mfd, 16V
C202	22440320	EL, 0.22mfd, 50V
C203	22440271	EL, 0.47mfd, 50V
C204	22380070	PS, 1000pF, 125V, D
C205	22440272	EL, 1mfd, 50V
C206, 207	22360330	BL, 0.033mfd, 25V, M
C208, 209	22440272	EL, 1mfd, 50V
C210	22440277	EL, 22mfd, 6.3V

RESISTORS

All resistors are carbon film 1/8W, ±5%. K = 1000

R001	22540518	4.7K ohm
R002	22540497	82 ohm
R003	22540522	10K ohm
R004	22540525	18K ohm
R005	22540523	12K ohm
R006	22540530	47K ohm
R007	22540538	220K ohm
R101	22540508	680 ohm
R102	22540494	47 ohm
R103	22550172	180 ohm
R104	22540180	150 ohm
R105	22540218	220K ohm
R106	22540523	12K ohm
R202	22540510	1K ohm
R203	22540522	10K ohm
R204	22658593	4.7K ohm, Semi-fixed Variable
R205	22540504	330 ohm
R206	22540533	82K ohm, (TA7323P-GR)
R206	22540535	120K ohm, (TA7323P-Y)
R206	22540538	220K ohm, (TA7323P-O)
R206	22540543	560K ohm, (TA7323P-R)
R207, 208	22540516	3.3K ohm

11–1. HEADPHONE EXPLODED VIEW

– TA, TC, AY –

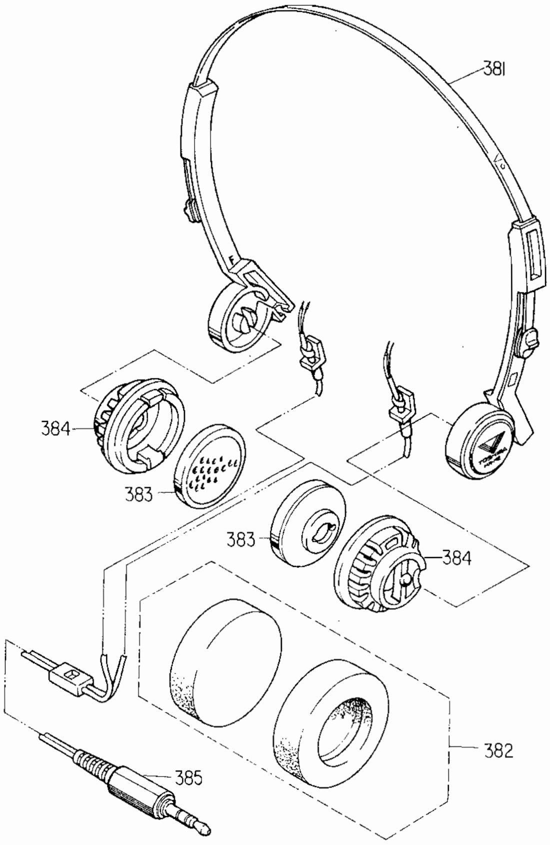

381
384
383
383
384
382
385

Figure 28.

■ CARE FOR UNIT ASSEMBLY AND REPLACEMENT OF CORD WITH PLUG

1. Insert tweezers into dent of unit case and detach the assembly from the case with tweezers lifting up.

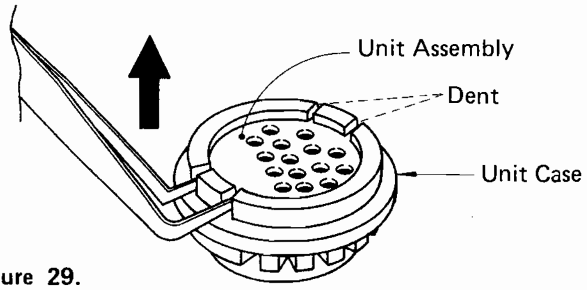

Unit Assembly
Dent
Unit Case

Figure 29.

2. Unsolder the back of assembly to remove the cord with plug.

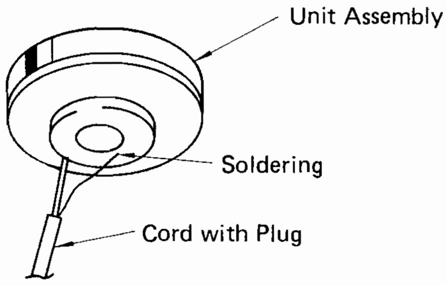

Unit Assembly
Soldering
Cord with Plug

Figure 30.

11–2. HEADPHONE PARTS LIST

Symbol No.	Part No.	Description
381	22810066	Head Band Ass'y, (TA/TC/AY)
382	22810067	Ear Pad Set, (TA/TC/AY)
383	22810068	Unit Ass'y, (TA/TC/AY)
384	22810069	Unit Case, (TA/TC/AY)
385	22810070	Cord Ass'y With Plug, (TA/TC/AY)

11–3. HEADPHONE EXPLODED VIEW

– YY, EY, RY, MY –

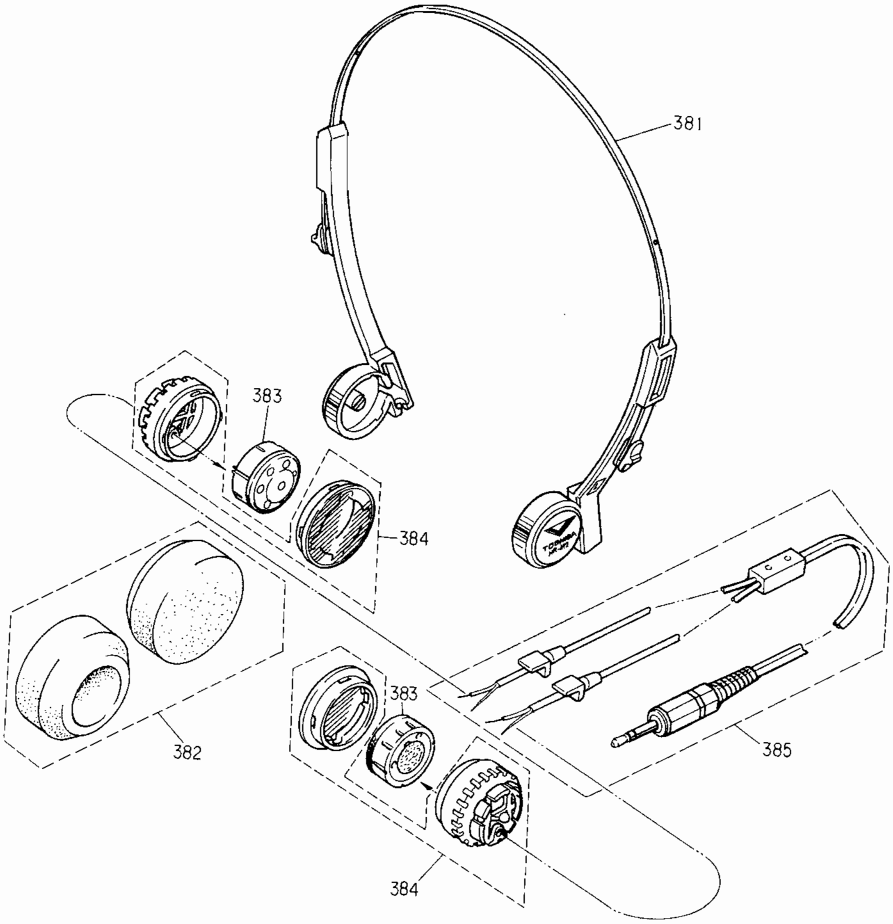


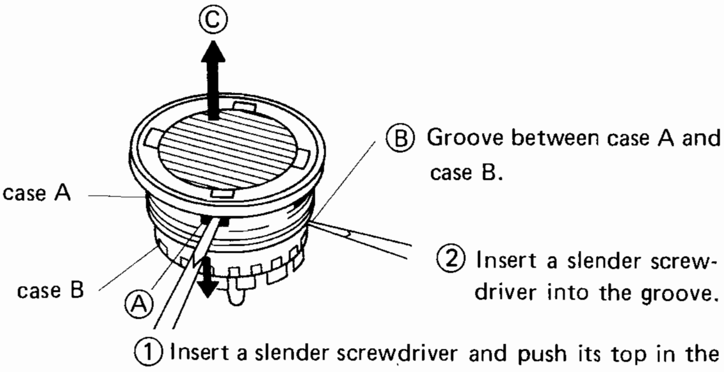
Figure 31.

■ CARE FOR UNIT ASSEMBLY AND REPLACEMENT OF CORD WITH PLUG

As for assembly of headphone case, case A (net side) is combined with case B (frame side) by the claw of case B.

(1) Insert the screwdriver (–) into the hole of caseⒶ and push down the tip of screwdriver in the direction of arrow by the principle of lever to make a groove between case A and case B.

(2) Insert a slender screwdriver into the groove Ⓑ and unhook the claw with the case A raising up in the direction of arrow Ⓒ.



Ⓑ Groove between case A and case B.

② Insert a slender screwdriver into the groove.

① Insert a slender screwdriver and push its top in the direction of arrow.

Figure 32.

Note: When disassembling the case with a screwdriver, take enough care not to damage the case or unit assembly in the case.

11–4. HEADPHONE PARTS LIST

Symbol No.	Part No.	Description
381	22810061	Head Band Ass'y, (YY/EY/RY/MY)
382	22810062	Ear Pad Set, (YY/EY/RY/MY)
383	22810063	Unit Ass'y, (YY/EY/RY/MY)

Symbol No.	Part No.	Description
384	22810064	Case Set, (YY/EY/RY/MY)
385	22810065	Cord Ass'y With Plug, (YY/EY/RY/MY)

10–4. PARTS LIST

– ACCESSORIES –

Symbol No.	Part No.	Description
AC01	22903139	Owner's Manual, (TA)
AC01	22903140	Owner's Manual, (TC)
AC01	22903141	Owner's Manual, (YY/EY/MY)
AC01	22903142	Owner's Manual, (RY)
AC01	22903143	Owner's Manual, (AY)

Symbol No.	Part No.	Description
AC02	22105367	Demonstration Tape
AC03	22991088	Carring Case
AC04	22991086	Belt, Strap
AC05	22906288	Caution Label

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